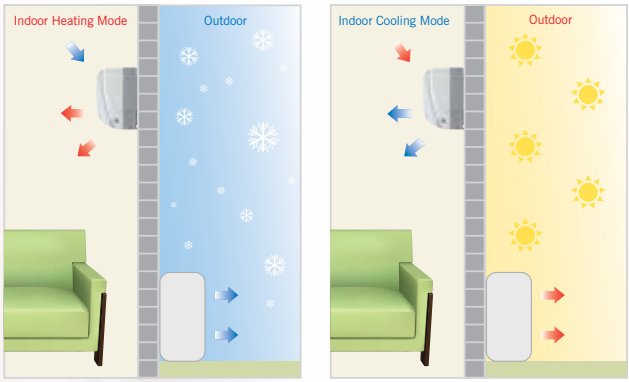
MITSUBISHI ELECTRIC

HEAT PUMPS
AIR CONDITIONING

Choose a Heat Pump that's actually designed to heat, you'd be surprised how many aren't!

MITSUBISHI ELECTRIC

Superior heating, year round comfort.



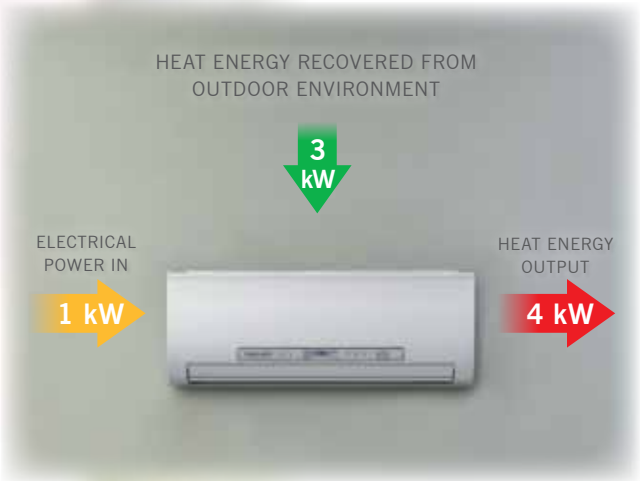
How Do Heat Pumps Work?

Mitsubishi Electric Heat Pumps are engineered to provide superior heating. Heat pumps work in the same way as your refrigerator except there are two separate parts to the system: An outdoor unit housing the compressor, which extracts freely available heat energy from the outside air and transfers or “pumps” it back inside your home via the indoor unit. The result – you feel warm inside.

Like most other heat pumps, during summer the Mitsubishi Electric range can be used in reverse to provide cooling. But by focusing on warmth Mitsubishi Electric Heat Pumps are better at what New Zealanders want them to do... keep you warm in winter.

Why design to heat?

In the depths of winter, a heat pump designed to cool needs to work overtime to compensate for the cooler ambient temperatures. That seriously reduces performance. So we think heating first. The result is year-round reliability. Winter warmth and a cool home in summer. As too many people discover, a heat pump designed for cooling can disappoint when they need it the most, when the temperature drops outside.



Heat Pumps Offer Maximum Efficiency

EECA (Energy Efficiency Conservation Authority) has identified heat pumps as one of the most energy efficient forms of heating available in New Zealand. Heat pumps do not create heat; they simply move available heat from one place to another. The little electrical energy that is needed is predominantly used to run the compressor.

Typically, 1kW of electrical energy is required to “pump” up to 4kW of available heat energy from the outside to a specific area inside the home. In other words, the heat pump transfers a lot more energy than it uses. With energy efficiencies of up to 400%, heat pumps are promoted by EECA as one of the most energy efficient forms of heating available to New Zealanders. This is often represented as COP (Co-efficient Of Performance), the ratio of kW input to kW output. In the example above the COP would be 4.

Learn more about ACOP and AEER on page 20.

Energy Star Partnership

Mitsubishi Electric proudly partners with Energy Star – the global mark of energy efficiency. Heat pumps that achieve this mark meet strict energy efficiency guidelines and also have proven heating performance in cold conditions. The entire Mitsubishi Electric range of High Wall Heat Pumps achieve the Energy Star Mark.

Choosing the Right Heat Pump

Every home is as individual as its owner – from décor to furnishings, appliances and the overall style of the house. Freedom of choice defines your living space, and selecting a heat pump is no different.

Purchasing a heat pump is a long term investment, so we would like to help make it as easy as possible for you to make that decision. Mitsubishi Electric offers a wide range of heat pumps to suit any home, in capacities which ensure total home comfort for houses of all sizes. Whether you want your heat pump on the wall, floor or ceiling-concealed, Mitsubishi Electric have a model to suit.

HIGH WALL MOUNTED P. 7–12

High wall (or wall mounted) heat pumps are the most popular choice, favoured because no floor space is sacrificed at the expense of the heat pump. High Walls have evolved from bulkier origins, to what are now stylish, unobtrusive, flat-panel units. A wide range of models are available within this range, and boast a variety of features depending on your requirements.

- High Wall Series p. 7
- Deluxe High Wall p. 9
- HyperCore® High Wall p. 11

FLOOR MOUNTED P. 13–14

Floor mounted heat pumps are an ideal option for people looking to replace their fire places or old night-store heaters, fitting neatly into the cavity left by their removal. Designed with adjustable upper and lower vanes, floor-mounted heat pumps are also perfect for those who appreciate warm feet! A slim-line design ensures these are a sleek addition to your home, while still ensuring total comfort.

- Floor Console Series p. 13
- HyperCore® upgrade available p. 11

CEILING CASSETTES P. 15

Ceiling cassettes are perfect for both residential and office spaces. Cassette units are an ideal solution for unobtrusive heating, as they are largely hidden from view, with only the air grille fascia visible. This slim-line design ensures versatility and ease of installation.

DUCTED SERIES P. 17

Ducted heat pumps are specifically designed for installation in concealed ceiling spaces, ideal for large residences or offices which feature a bulkhead ceiling. Ducted units are the ultimate solution for unobtrusive heating, as they are hidden from view with only air grilles visible.

MULTI-SPLIT SYSTEMS P. 18

Multi-split systems allow you to connect multiple indoor units to a single outdoor unit, allowing selection from a wide variety of indoor units to suit individual rooms without the need to accommodate multiple outdoor units. Ideal for homes which require heating in multiple living spaces, Multi-split systems offer efficient, quiet operation for the entire home.

Room Guide

Ensuring your heat pump is the right size for your home is just as important as choosing the right style.

Correct sizing is crucial in ensuring you receive optimal comfort levels for your home. Selecting a heat pump which is too small for the area you are trying to heat will result in increased noise, poor performance and higher power consumption as the unit works to achieve heating levels beyond its capability. Installing a heat pump which is too large will create draughts and uneven heat output.

Factors such as the age of the home, adequate insulation, the amount of glass windows and the climate of the area you live in must also be considered before installation takes place, as these have a direct bearing on the performance required.

Mitsubishi Electric has designed the guide below to help you determine the approximate heating requirement of your room.

New or Well Insulated House*

Room Size Calculation									Heat Pump Models					
Room Size		Ceiling Height		Room Volume		Room Size Factor		kW Heating	High Wall	Deluxe High Wall	HyperCore® High Wall	Floor Console	HyperCore® Floor Console	Ceiling Cassette
4m x 3m	x	2.4m	=	28.8m³	x	55 watts per m³	=	1.6 kW	MSZ-GE25†	MSZ-FB25†		MFZ-KA25†		SLZ-KA25†
4m x 4m	x	2.4m	=	38.4m³	x	55 watts per m³	=	2.1 kW	MSZ-GE25†	MSZ-FB25†		MFZ-KA25†		SLZ-KA25†
4m x 5m	x	2.4m	=	48.0m³	x	55 watts per m³	=	2.6 kW	MSZ-GE25†	MSZ-FB25†		MFZ-KA25†		SLZ-KA25
5m x 5m	x	2.4m	=	60.0m³	x	55 watts per m³	=	3.3 kW	MSZ-GE25	MSZ-FB25	MSZ-FB35VAH†	MFZ-KA25		SLZ-KA35
6m x 5m	x	2.4m	=	72.0m³	x	55 watts per m³	=	4.0 kW	MSZ-GE33	MSZ-FB35	MSZ-FB35VAH	MFZ-KA35	MFZ-FB50VAH†	SLZ-KA35
6m x 6m	x	2.4m	=	86.4m³	x	55 watts per m³	=	4.7 kW	MSZ-GE42	MSZ-FB50	MSZ-FB50VAH	MFZ-KA50	MFZ-FB50VAH	SLZ-KA50
6m x 7m	x	2.4m	=	100.8m³	x	55 watts per m³	=	5.5 kW	MSZ-GE50	MSZ-FB50	MSZ-FB50VAH	MFZ-KA50	MFZ-FB50VAH	
7m x 7m	x	2.4m	=	117.6m³	x	55 watts per m³	=	6.5 kW	MSZ-GE60					
7m x 8m	x	2.4m	=	134.4m³	x	55 watts per m³	=	7.4 kW	MSZ-GE71					
8m x 8m	x	2.4m	=	153.6m³	x	55 watts per m³	=	8.4 kW	MSZ-GE80					

† Higher rated unit for application, but can be used.

Cold Damp House or Lots of Glass*

Room Size Calculation									Heat Pump Models					
Room Size		Ceiling Height		Room Volume		Room Size Factor		kW Heating	High Wall	Deluxe High Wall	HyperCore® High Wall	Floor Console	HyperCore® Floor Console	Ceiling Cassette
4m x 3m	x	2.4m	=	28.8m³	x	65 watts per m³	=	1.9 kW	MSZ-GE25†	MSZ-FB25†		MFZ-KA25†		SLZ-KA25†
4m x 4m	x	2.4m	=	38.4m³	x	65 watts per m³	=	2.5 kW	MSZ-GE25†	MSZ-FB25†		MFZ-KA25†		SLZ-KA25
4m x 5m	x	2.4m	=	48.0m³	x	65 watts per m³	=	3.1 kW	MSZ-GE25	MSZ-FB25	MSZ-FB35VAH†	MFZ-KA25		SLZ-KA35
5m x 5m	x	2.4m	=	60.0m³	x	65 watts per m³	=	3.9 kW	MSZ-GE33	MSZ-FB35	MSZ-FB35VAH	MFZ-KA35	MFZ-FB50VAH†	SLZ-KA35
6m x 5m	x	2.4m	=	72.0m³	x	65 watts per m³	=	4.7 kW	MSZ-GE42	MSZ-FB50	MSZ-FB50VAH	MFZ-KA50	MFZ-FB50VAH	SLZ-KA50
6m x 6m	x	2.4m	=	86.4m³	x	65 watts per m³	=	5.6 kW	MSZ-GE50	MSZ-FB50	MSZ-FB50VAH	MFZ-KA50	MFZ-FB50VAH	
6m x 7m	x	2.4m	=	100.8m³	x	65 watts per m³	=	6.5 kW	MSZ-GE60					
7m x 7m	x	2.4m	=	117.6m³	x	65 watts per m³	=	7.6 kW	MSZ-GE71					
7m x 8m	x	2.4m	=	134.4m³	x	65 watts per m³	=	8.7 kW	MSZ-GE80					

† Higher rated unit for application, but can be used.

* These are a guide only – a heat pump should not be purchased without first obtaining an in-home quote by a qualified Mitsubishi Electric Authorised Installer.

The MITSUBISHI ELECTRIC Advantage

Designed for Superior Heating

Mitsubishi Electric Heat Pumps are engineered for superior heating. Naturally, our systems will also keep you cool in summer. But by focusing on warmth, our heat pumps are better at what New Zealanders want them to do... keep you warm in winter!

For more information on The Mitsubishi Electric Advantage go to: www.mitsubishi-electric.co.nz

The **MITSUBISHI ELECTRIC** Advantage

Designed for superior heating

New Zealand's *Quietest* Heat Pumps *...Ever!*

New Zealand's *Best* low temp performance

Unique *Energy Saving* features

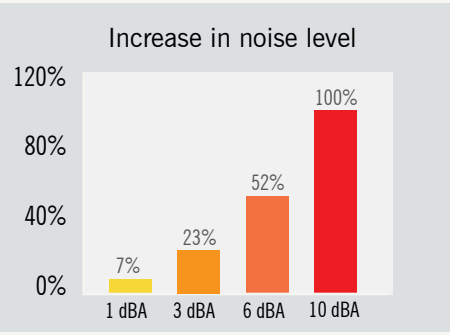
New Zealand's Quietest Heat Pumps...Ever!

Quiet matters. It's why Mitsubishi Electric pays so much attention to sound. Sound is measured in decibels or dBA. Human hearing begins at around 0 dBA. However sounds usually need to reach 10-15 dBA, the level of someone breathing normally, before you hear them.

New Zealand's Quietest Heat Pumps...Ever. Mitsubishi Electric Heat Pumps start from only 19 dBA, less than a whisper. This is because we want you to feel the warmth, not hear it. Mitsubishi Electric knows that even a small dBA increase impacts on sound. So we constantly work to reduce our sound levels. The result? Our GE Series High Wall Heat Pumps are New Zealand's Quietest starting from an amazingly low 19 dBA. So you'll be warm and comfortable at home, and hear less than a whisper from us.

Complete Quietness - on all fan speeds

We mean it. Whatever the model, whatever the fan speed, our heat pumps are designed to be quiet. As you increase the fan speed, more air movement is achieved but the noise level also increases. Some manufacturers are happy with low sound only on the lowest fan setting. But turn the fan up and the sound jumps. Our heat pumps work differently giving you quietly superior comfort on all fan speeds.



To learn more about New Zealand's Quietest Heat Pumps, the GE Series — see page 7

New Zealand's Best Low Temperature Performance...Guaranteed.

Mitsubishi Electric Heat Pumps are engineered for superior heating. You'll stay snug no matter how cold it is outside, and we guarantee our heating performance right down to -15°C. That's seriously cold, but who cares about outside, when you're deliciously warm inside?

Intelligent Defrost

All Mitsubishi Electric Heat Pumps are fitted with intelligent defrost technology to ensure minimal time defrosting. The fact is, when it's less than zero outside, all heat pumps must perform a "defrost cycle". This removes ice build up on the outdoor coils. We take this one step further. Mitsubishi Electric has developed an Advanced Defrost Strategy. This uses Fuzzy Logic, a form of Artificial Intelligence. The program measures and records temperatures and running times, and uses this data to start defrosting only when required.

HyperCore® High Performance Heat Pumps

No other heat pump available in New Zealand guarantees its full-rated capacity from +7°C to –15°C. No matter how cold it gets, right down to -15°C, you can relax. Our HyperCore® Heat Pumps won't drop their heating capacity.

To learn more about New Zealand's Best Low Temperature Performance Heat Pump, HyperCore® — see page 11

Unique Energy Saving Features

True energy efficiency goes beyond rating labels by teaming energy saving features and industry leading inverter technology, saving you even more on your heating bill.

Unique Energy Saving Features include:

1. i-see Sensor - automatically seeks out temperature differences then directs airflow to where it's really needed. You gain total comfort with reduced energy loss.
2. "i-save" Mode - save any settings for temperature, fan speed and airflow direction automatically so you can quickly return to the way you like things.
3. Econo Cool - use this energy saving function in cooling mode

Inverter Technology for even more savings!

Savings in energy. Savings in money. Mitsubishi Electric's Inverter Technology matches compressor speed to your indoor heating or cooling conditions. You'll gain energy savings of up to 30% compared to fixed speed systems. Another advantage, our Inverter models can also run above their rated capacity. So you achieve the indoor environment you want as fast as possible, even under adverse conditions.

To learn more about our Unique Energy Saving Features, see the Deluxe Series — see page 9

High Walls

At barely a whisper, Mitsubishi Electric's GE Series includes New Zealand's Quietest Heat Pumps...Ever!

Even a small decibel (dBA) increase can dramatically amplify the sound you hear, so when you are buying a heat pump you want to know it's the quietest available. Starting from just 19dBA, our GE Series Heat Pumps are exactly that.

GE Series High Wall Range

Small Room

MSZ-GE25VA

Heating Capacity: 3.2 kW *(min 1.3kW~max 4.5 kW)*

Heating efficiency - ACOP: 4.31

Cooling Capacity: 2.5 kW *(min 1.1kW~max 3.5kW)*

Cooling efficiency - AEER: 4.25

MSZ-GE33VA

Heating Capacity: 4.0 kW *(min 1.4kW~max 4.8kW)*

Heating efficiency - ACOP: 3.82

Cooling Capacity: 3.3 kW *(min 1.4kW~max 3.9kW)*

Cooling efficiency - AEER: 3.69

Medium Room

MSZ-GE42VA

Heating Capacity: 5.4 kW *(min 1.4kW~max 6.0kW)*

Heating efficiency - ACOP: 3.54

Cooling Capacity: 4.2 kW *(min 0.9kW~max 4.8kW)*

Cooling efficiency - AEER: 3.34

MSZ-GE50VA

Heating Capacity: 5.8 kW *(min 1.4kW~max 7.2kW)*

Heating efficiency - ACOP: 3.56

Cooling Capacity: 5.0 kW *(min 1.4kW~max 5.4kW)*

Cooling efficiency - AEER: 3.06

Large Room

MSZ-GE60VA

Heating Capacity: 6.8 kW *(min 2.0kW~max 9.3kW)*

Heating efficiency - ACOP: 3.75

Cooling Capacity: 6.0 kW *(min 1.5kW~max 7.5kW)*

Cooling efficiency - AEER: 3.49

MSZ-GE71VA (MSZ-GE71VA + MUZ-GE71VA)

Heating Capacity: 8.1 kW *(min 2.2kW~max 9.9kW)*

Heating efficiency - ACOP: 3.75

Cooling Capacity: 7.1 kW *(min 2.4kW~max 8.7kW)*

Cooling efficiency - AEER: 3.39

MSZ-GE80VA (MSZ-GE80VA + MUZ-GE80VA)

Heating Capacity: 9.0 kW *(min 2.2kW~max 11.1kW)*

Heating efficiency - ACOP: 3.52

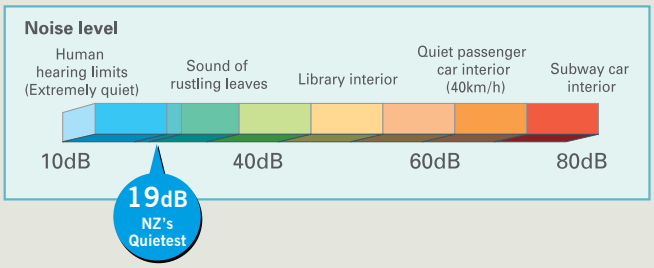
Cooling Capacity: 8.0 kW *(min 2.4kW~max 9.2kW)*

Cooling efficiency - AEER: 3.12

For more about ACOP and AEER go to page 20

New Zealand's Quietest Heat Pumps

The new GE Series features the two Quietest Heat Pumps available in New Zealand. The GE Series also includes a new Quiet fan speed. This new fan speed setting has allowed Mitsubishi Electric to produce even quieter Heat Pumps, in fact the GE25 and GE33 are New Zealand's Quietest Heat Pumps at just 19 dBA on their lowest fan speed. This means even on Quiet fan speed you can be assured these heat pumps will not compromise on home comfort.



MODEL	GE25	GE33	GE42	GE50	GE60	GE71	GE80
COOL	19dBA	19dBA	26dBA	28dBA	29dBA	30dBA	30dBA
HEAT	19dBA	19dBA	26dBA	28dBA	29dBA	30dBA	30dBA

Sound Levels rated at lowest fan speed.

New 7-Day Programmable Timer

Available on GE60/71/80

The 7-Day Timer function allows up to four settings (per 24-hour period) including start/stop operation and temperature changes. This ensures higher comfort levels while the home is occupied, saving both time and money.

Example:

- **6am** : The temperature automatically changes to 21°C.
- **8am** : The heat pump turns off while the home is unoccupied.
- **5pm** : The heat pump turns back on and with the temperature set at 21°C, this warms the home in preparation for your return home.
- **11pm** : The temperature reduces to 18°C, while you are sleeping for energy saving operation.

A standard 24-hour timer needs to be manually reactivated each time. The Mitsubishi Electric 7-Day Timer eliminates the need to reset the timer daily.

Higher Energy Efficiency

The combination of cutting-edge inverter technologies and a highly efficient heat exchanger allows the GE Series to produce remarkable energy efficiencies. The entire GE Series has gained the ENERGY STAR™ Mark showing that they achieve the highest levels of energy efficiency. You can rest assured the GE Series will provide the highest levels of energy efficiency without compromising on performance or quality.

Unique Energy Saving Features

"i-save " Mode

With this function, settings including temperature, fan speed, and airflow direction for both cooling and heating operation can be saved simultaneously. This function can be used to quickly return to your preferred settings.

Econo Cool

This is an energy saving function for cooling during summer.

Additional features:

- Guaranteed Heating at –15°C
- Advanced Filtration
- Compact Flat Panel Design
- Auto Change Over Function

Learn more and compare features on pages 19-20

Deluxe High Walls

The Mitsubishi Electric Deluxe High Wall Range offers you ultimate control to ensure year-round comfort.

Combining high energy efficiency with Unique Energy Saving Features, this range is also specifically designed to include advanced filtration, providing optimal air quality — perfect for asthma and allergy sufferers.

Deluxe Series High-Wall Range

Small Room

MSZ-FB25VA High Wall Inverter

Heating Capacity: 3.2 kW *(min 1.5kW~max 5.5 kW)*

Heating efficiency - ACOP: 4.89

Cooling Capacity: 2.5 kW *(min 1.1kW~max 3.5kW)*

Cooling efficiency - AEER: 4.63

MSZ-FB35VA High Wall Inverter

Heating Capacity: 4.0 kW *(min 1.5kW~max 6.0kW)*

Heating efficiency - ACOP: 4.42

Cooling Capacity: 3.5 kW *(min 1.1kW~max 4.1kW)*

Cooling efficiency - AEER: 3.94

Medium Room

MSZ-FB50VA High Wall Inverter

Heating Capacity: 6.0 kW *(min 0.9kW~max 7.8kW)*

Heating efficiency - ACOP: 3.68

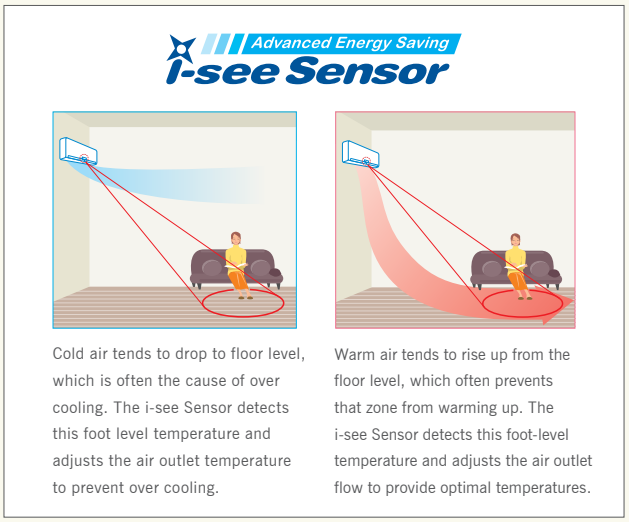
Cooling Capacity: 5.0 kW *(min 0.8kW~max 5.8kW)*

Cooling efficiency - AEER: 3.19

For more about ACOP and AEER go to page 20

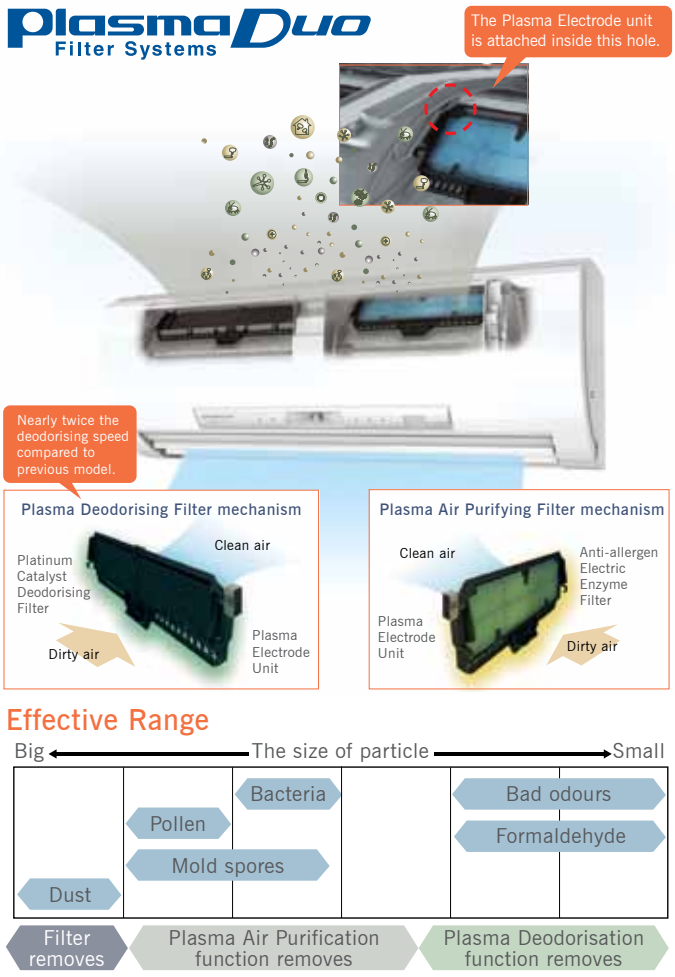
Advanced Energy Saving Sensor Efficient Temperature Control

Conventional heat pumps can't measure factors such as radiant heat or cold draughts that can affect room temperature. Some areas may therefore be warmer or cooler than others. The advanced "i-see Sensor" measures room temperature at floor level as well at the unit itself, resulting in greater temperature control. Unlike standard systems, the "i-see Sensor" automatically moves from side to side, searching out temperature disparities and directing airflow to specific areas where it is really needed. Wide airflow of 150° from left to right (90° in cooling) ensures all corners of the room are kept at the optimal selected temperature. The "i-see Sensor" controls air temperature and air movement to prevent excessive heating or cooling and unnecessary operation. Ensuring total comfort while reducing energy wastage.


Advanced Energy Saving
i-see Sensor
Cold air tends to drop to floor level, which is often the cause of over cooling. The i-see Sensor detects this foot level temperature and adjusts the air outlet temperature to prevent over cooling.
Warm air tends to rise up from the floor level, which often prevents that zone from warming up. The i-see Sensor detects this foot-level temperature and adjusts the air outlet flow to provide optimal temperatures.

"Area Setting" - for waste-free, energy-saving heating and cooling.

In AREA mode, efficient heating or cooling is directed where it is really needed - the right side, left side or the room as a whole.



Effective Range

Plasma Duo Filtration

The Plasma Duo Filter system keeps the air pure which is ideal for asthma and allergy sufferers. It has two plasma air purifying functions that work together to remove airborne dirt particles from micron to nano-size in scale.

A plasma electrode unit generates ozone & plasma. This combination and two special filters makes a dynamic plasma air cleaning function.

Plasma Deodorisation

The Platinum Catalyst Deodorising Filter uses tiny holes as small as 1 nanometer on a surface of approximately 3,000m^2 to capture small odour-laden substances in the air and break them down.

Plasma Air Purification

An Anti Allergen Electric Enzyme Filter utilises the combined power of static electricity charged in the filter and the plasma generated in the Plasma Electrode Unit to capture bacteria, pollen and other allergens in the air, which are then neutralised in the filter.

Additional features:

- Whisper Quiet Operation from 20dBA
- Econo Cool
- "i-Save"
- Compact Flat Panel Design

Learn more and compare features on pages 19-20

Mitsubishi Electric HyperCore® Heat Pumps are New Zealand's Best Performing Low Temperature Heat Pump... GUARANTEED.

Unlike conventional heat pump systems which produce less heat as the outdoor temperature drops, HyperCore® units are guaranteed to deliver their full rated capacity at 7°C, 2°C, 0°C...in fact, we'll guarantee it all the way down to -15°C!

HyperCore® Range

Small Room - High Wall

MSZ-FB35VAH HyperCore® High Wall Inverter

Heating Capacity: 4.0 kW *(min 1.3kW~max 6.5kW)*

Heating efficiency - ACOP: 4.42

Cooling Capacity: 3.5 kW *(min 0.8kW~max 4.1kW)*

Cooling efficiency - AEER: 3.94

Medium Room - High Wall

MSZ-FB50VAH HyperCore® High Wall Inverter

Heating Capacity: 6.0 kW *(min 0.9kW~max 8.2kW)*

Heating efficiency - ACOP: 3.68

Cooling Capacity: 5.0 kW *(min 0.8kW~max 5.8kW)*

Cooling efficiency - AEER: 3.19

Medium Room - Floor Console

MSZ-FB50VAH HyperCore® Floor Console Inverter

Heating Capacity: 5.4 kW *(min 0.9kW~max 7.9kW)*

Heating efficiency - ACOP: 3.45

Cooling Capacity: 4.8 kW *(min 0.9kW~max 5.4kW)*

Cooling efficiency - AEER: 3.02

For more about ACOP and AEER go to page 20

The HyperCore® Guarantee

Superior heating performance **GUARANTEED**, regardless of outdoor temperatures. The only heat pump guaranteed to produce it's fully rated heating capacity right down to -15°C.

The Heating Performance Myth

In New Zealand, heat pumps are rated against a standard known as H1, where performance is tested at a fixed outdoor ambient temperature of 7°C. Obviously temperatures can be a lot lower during a typical kiwi winter – often well below 0°C! As the temperature drops outside, ordinary heat pumps will struggle to produce their full heating output, meaning less heat is produced and comfort levels are compromised. Mitsubishi Electric's HyperCore® Technology ensures the same amount of heat is produced, whether it's 7°C, 0°C or even -15°C... GUARANTEED!

MSZ-FB~VAH HyperCore® High Wall Heat Pump

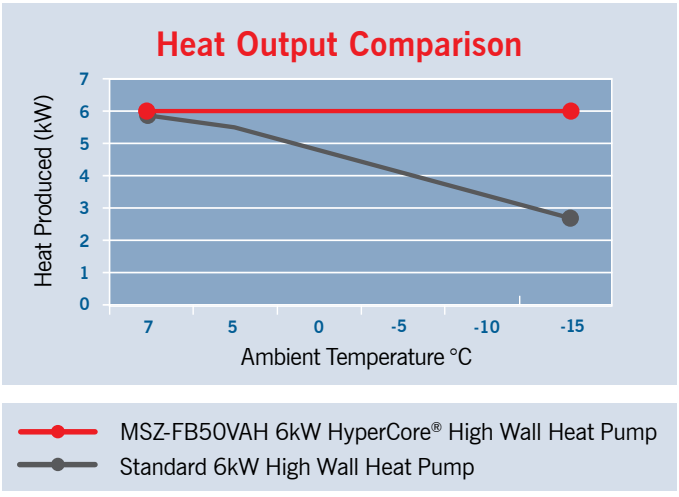
HyperCore® in action in Queenstown

HyperCore® Defrost Logic

When temperatures drop below zero degrees ice will build up on the outdoor unit of any heat pump. How the heat pump reacts to this determines how effective it will be in providing heat to your home. Older style heat pumps initiate defrost by a fixed time or coil temperature. This reduces performance by either defrosting too often or not defrosting often enough. When a heat pump defrosts it concentrates on bringing the outdoor unit back up to a suitable temperature. While in defrost mode a heat pump will not be delivering heat into your home. HyperCore® defrost logic has been fine tuned to extend the time between defrost periods and optimise its cold temperature performance. This allows a HyperCore® Heat Pump to continue delivering its full rated heating capacity right down to –15°C.

Not all Heat Pumps are created equal

HyperCore® Heat Pumps offer New Zealand's best low temperature performance and we guarantee it! You can relax in warmth, no matter how cold it gets outside.
For example, the Mitsubishi Electric MSZ-FB50VAH HyperCore® Heat Pump will continue to deliver 6kW of heat at 7°C, 2°C, 0°C and even -15°C. As the graph shows, the kW capacity of a standard heat pump will drop as the outdoor ambient conditions drop – however the HyperCore® Heat Pump continues to deliver the same amount of heat.



Additional features:

- HyperCore® Heating Guarantee
- Guaranteed Heating Operation -25°C
- Whisper Quiet Operation from 20dBA
- Energy Saving i-see Sensor

Learn more and compare features on pages 19-20

Floor Consoles

Perfect room temperatures to ensure head to toe comfort.

Specifically designed to sit discreetly at floor level, the slim-line Compact Floor Console is ideal for replacement of traditional floor mounted heating appliances such as night-store heaters or fireplaces. Independently controllable upper and lower vanes ensure both optimal air distribution and warm feet.

Compact Floor Console Range

Small Room

MFZ-KA25VA

Heating Capacity: 3.4 kW *(min 0.9kW~max 5.1kW)*
Heating efficiency - ACOP: 3.83

Cooling Capacity: 2.5 kW *(min 0.9kW~max 3.4kW)*
Cooling efficiency - AEER: 3.96

MFZ-KA35VA

Heating Capacity: 4.0 kW *(min 0.9kW~max 6.2kW)*
Heating efficiency - ACOP: 3.70

Cooling Capacity: 3.5 kW *(min 0.9kW~max 3.9kW)*
Cooling efficiency - AEER: 3.37

For more about ACOP and AEER go to page 20

Medium Room

MFZ-KA50VA

Heating Capacity: 6.0 kW *(min 0.9kW~max 7.9kW)*
Heating efficiency - ACOP: 3.28

Cooling Capacity: 4.8 kW *(min 0.9kW~max 5.4kW)*
Cooling efficiency - AEER: 3.21

HyperCore® Upgrade

If you experience cold temperatures and/or high humidity over winter then you should consider upgrading your floor console heat pump to a HyperCore®. Still the only heat pump available guaranteed to provide the same amount of heat regardless of how cold the outdoor temperature drops to. For more information on HyperCore® see pages 11-12.

HYPERCORE®

Optimum Heat Distribution

Mitsubishi Electric's compact floor console range ensures perfect room temperatures are achieved at all times. Thermostatically controlled dual upper and lower vanes provide ultimate comfort and eliminate draughts while heating. Mitsubishi Electric Inverter Control allows optimum comfort conditions to be achieved in the shortest period of time. This is vital when outdoor temperatures drop below freezing, or when the unit is first turned on.

Auto Change Over

The system will automatically switch between heating and cooling once the desired temperature is reached, to maintain the room temperature without user intervention. For example, on a frosty morning the unit will operate in heating mode to maintain a room temperature of 21°C. Once the sun rises and begins to warm the room, the unit can switch to cooling to maintain the 21°C set temperature.

Superior Design

Compact and slim-line, Mitsubishi Electric's Floor Console Range has been designed to ensure they will be discreet and unobtrusive addition to any interior. A versatile solution, the Floor Console unit is favoured as a suitable replacement of older floor-mounted heating devices At only 22dBA* on its lowest fan speed* the Floor Console offers total comfort while still delivering the whisper quiet performance that you have come to expect from Mitsubishi Electric.

**(MFZ-KA25VA).*

Cleaner, Healthier Air

The combination of Catechin and Anti-Allergy Enzyme Filters ensure effective deodorisation, active filtering and the significant reduction of common allergens and bacteria. This is the key to cleaner, healthier air.

In addition to the deodorising effect of the Catechin Filter, the Anti-Allergy Enzyme filter traps dust mites and their droppings, pollen and other airborne allergens on the filter filament, which decomposes them using artificial enzymes. A sterilising agent also acts to combat bacterial and viral effects, all combining to support a cleaner, healthier air supply.

Additional features:

- New Zealand's Quietest Floor 22dBA
- Guaranteed Heating at –15°C
- HyperCore® Upgrade Available
- Vertical & Horizontal Airflow

Learn more and compare features on pages 19-20

Ceiling Cassettes

Mitsubishi Electric Ceiling Cassettes offer attractive, inconspicuous heating – a versatile solution for residential and office heating requirements.

The compact size of the Ceiling Cassette Range is ideal for installation in homes, small business offices or areas with ceiling tiles, while the lightweight design helps to make installation easier and more convenient.

Ceiling Cassette Range

Small Room

SLZ-KA25VAQ/L

Heating Capacity: 3.2 kW *(min 0.9kW ~ max 4.5kW)*

Heating efficiency - ACOP: 3.65

Cooling Capacity: 2.5 kW *(min 0.9kW ~ max 3.2kW)*

Cooling efficiency - AEER: 3.53

SLZ-KA35VAQ/L

Heating Capacity: 4.0 kW *(min 0.9kW~max 5.0kW)*

Heating efficiency - ACOP: 3.58

Cooling Capacity: 3.5 kW *(min 1.0kW~max 3.9kW)*

Cooling efficiency - AEER: 4.1 at part load

For more about ACOP and AEER go to page 20

Medium Room

SLZ-KA50VAQ/L

Heating Capacity: 5.0 kW *(min 0.9kW~max 6.5kW)*

Heating efficiency - ACOP: 3.17

Cooling Capacity: 4.6 kW *(min 1.1kW~max 5.2kW)*

Cooling efficiency - AEER: 2.95

Additional features:

- Fresh Air Intake
- Auto Change Over

Learn more and compare features on pages 19-20

Versatile Control

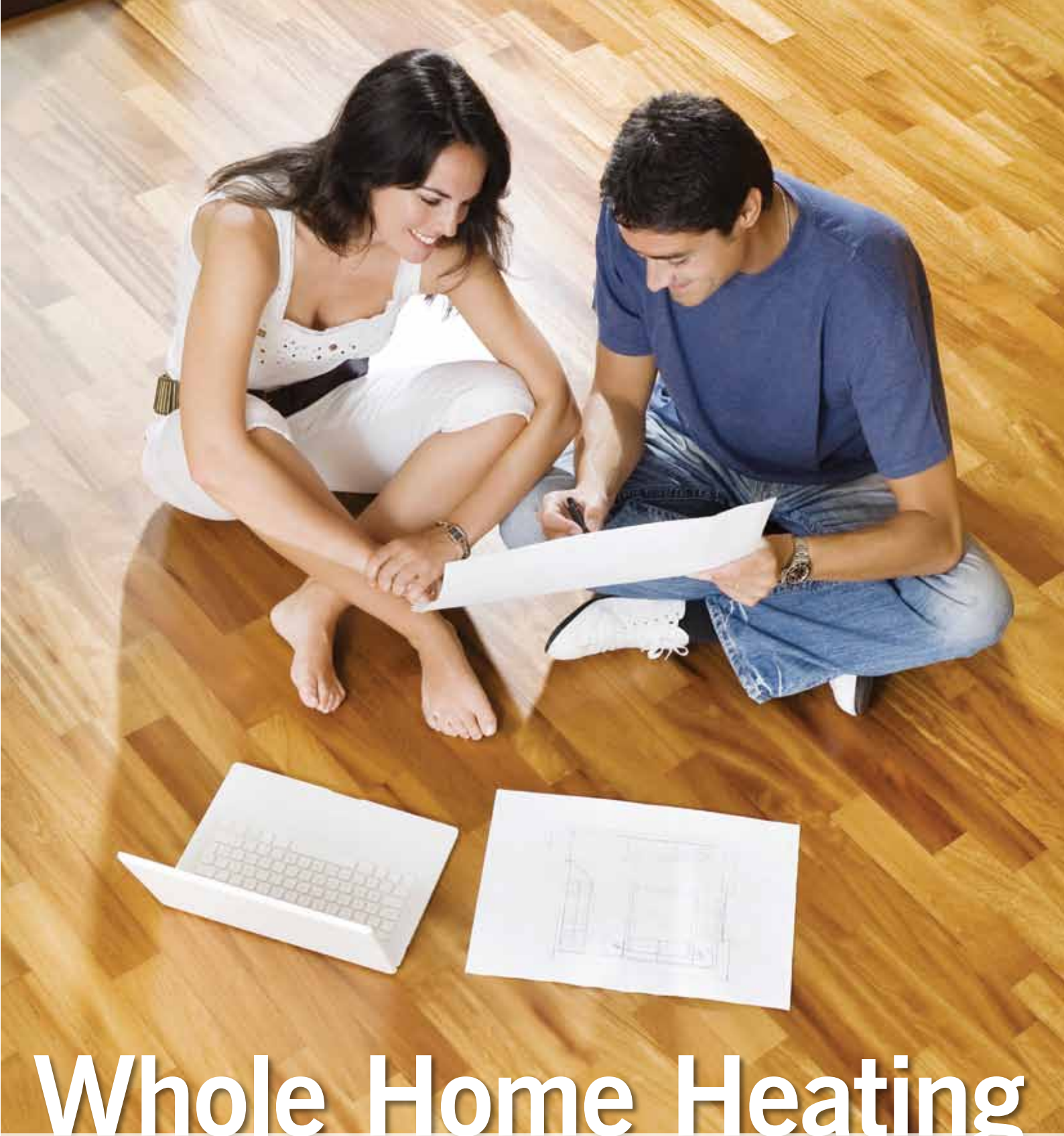
The cassette range comes equipped with your choice of either an infra-red remote with 12-hour timer, or a wall-mounted wired controller with 7-day timer.

Air-Cleaning Filtration

The built-in filter removes dust and contaminants, keeping air fresh at all times. Maintenance is as simple as vacuuming the filter.

Long Life Filter

To provide deodorising and air purifying performance, these washable filters can be used for up to 2,500 hours.



Whole Home Heating

The ideal choice when more than one room is being heated.

These options take heat pump technology to the next level but do require an in-depth assessment of your heating needs, a Mitsubishi Electric Authorised Installer can talk you through these options and specify the correct whole home heating solution for you.

Whole Home Solutions include: Ducted Heat Pumps (p.17) and Multi Split Systems (p.18)

For detailed information including model choices and specifications please visit: www.mitsubishi-electric.co.nz or consult your Authorised Mitsubishi Electric Installer.

Ducted Systems

Ducted system slim-line designs ensure versatility and ease of installation.

Ducted heat pumps are specifically designed for installation in concealed ceiling spaces, ideal for large residences or offices which feature a bulkhead ceiling. Ducted units are the ultimate solution for unobtrusive heating, as they are largely hidden from view with only air grilles visible.

Types of Systems

Ceiling Concealed

At only 200mm high these slim-line ducted systems are ideal for installation in lowered ceilings (or bulkheads). This option is used to heat one room in a discrete and unobtrusive way.

Ducted System

These units are completely hidden from view with only subtle grilles visible. The unit is installed in the roof cavity and ducts are used to connect to multiple rooms for heating and cooling.

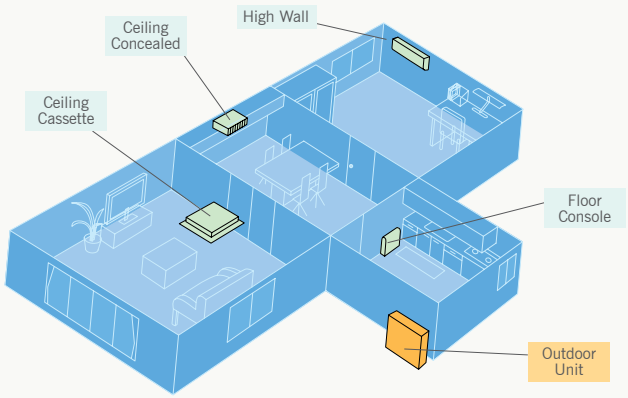
Multi-Split Systems

Connect multiple indoor units to a single outdoor unit.

This system gives you the freedom to select the indoor model best suited to each and every room in your home. Multi-Split Systems are designed to allow multiple indoor units of varying capacity and type to be connected to just one outdoor unit, enhancing exterior aesthetics by reducing the number of outdoor units required.

Benefits of a Multi-Split System

If more than one room requires heating and cooling, a Multi-Split system may be right for you. This system allows the indoor units chosen to reflect the specific needs of each room. For example, a whisper-quiet high wall could be selected for a bedroom, while a floor console could be used to replace a fireplace in the living room. The indoor units selected will be powered by just one outdoor unit, lowering the overall capital cost and increasing the energy efficiencies achieved.



Quiet Operation (Silent Mode)

Mitsubishi Electric has applied a Silent Mode to their Multi-Split units, ensuring outdoor sound levels can remain as low as 44dBA while operating.

Selecting the right system

Correct sizing of a Mitsubishi Electric Multi-Split System matches the energy load of the indoor units desired with the appropriate Multi-Split Outdoor. Your Mitsubishi Electric Authorised Installer will be able to guide you through this process while recommending the optimum type of heat pump for each room, ensuring the best solution for your whole home.

Features Checklist	High Wall Mounted				Floor Console		Ceiling Cassette
	GE Series Sml – Med	GE Series Large	FB Deluxe	HyperCore®	Compact	HyperCore®	
Energy Saving							
DC Inverter + PAM Control	✓	✓	✓	✓	✓	✓	✓
i-see Sensor			✓	✓			
AREA Setting			✓	✓			
i-save	✓	✓	✓	✓	✓	✓	
Econo Cool	✓	✓	✓	✓	✓	✓	
Superior Comfort							
Whisper Quiet Operation	✓	✓	✓	✓	✓	✓	✓
Quiet Fan Speed	✓	✓					
Auto Vane	✓	✓	✓	✓	✓	✓	✓
Area Setting			✓	✓			
Vertical Airflow					✓	✓	
Vertical Vane	✓		✓	✓			
Swing Vertical Vane		✓					
Swing Horizontal Vane	✓	✓	✓	✓	✓	✓	
Wide Airflow		✓					
Long Airflow		✓					
Designed To Heat							
Guaranteed Low Temp Performance (-15°C)	✓	✓	✓	✓	✓	✓	✓
HyperCore® Guarantee				✓		✓	
Fresh Air							
Plasma Duo Filter System			✓	✓			
Nano Platinum Filter		✓					
Long Life Filter							✓
Anti-Mold Air Cleaning			✓	✓			
Healthy Catechin Filter	✓				✓	✓	
Anti Allergy Enzyme Filter	✓	✓	✓	✓	✓	✓	
Self Cleaning Ozone Shower			✓	✓			
Sophisticated Design							
Flat Panel Style	✓	✓	✓	✓			
Compact Size	✓		✓	✓	✓	✓	✓
Pure White Finish	✓	✓	✓	✓			
Convenience							
24 Hour Timer on Remote	✓	✓	✓	✓	✓	✓	✓
7 Day Hand Held Timer		✓					
Wide Range Cooling Temp	✓	✓	✓	✓	✓	✓	✓
Auto Change Over	✓	✓	✓	✓	✓	✓	✓
Powerful Mode		✓					
Auto Restart	✓	✓	✓	✓	✓	✓	✓
Installation & Maintenance							
Failure Recall Function	✓	✓	✓	✓	✓	✓	✓
Simple Flare Connection	✓	✓	✓	✓	✓	✓	✓
Long Length Piping	✓	✓	✓	✓	✓	✓	✓
Multi-Split Connection for MXZ Series	✓	✓	✓		✓		✓
Self Diagnosis Function	✓	✓	✓	✓	✓	✓	✓

Glossary

Unique Energy Saving Features

DC Inverter with PAM Control

Inverter technology matches compressor speed to your indoor heating or cooling requirements, unlike older “fixed-speed” types which simply alternated between on and off. PAM (Pulse Amplitude Modulation) provides higher efficiency within the inverter by controlling the amount of power drawn.

“i-see” Sensor

The “i-see” sensor automatically seeks out and corrects temperature differences by directing airflow to specific areas. This provides total comfort with reduced energy loss. *More on p. 10.*

Area Setting

For waste-free, energy saving heating and cooling, AREA mode works in conjunction with the “i-See” sensor to direct heating where it is needed most.

“i-save” Mode

Saves preferred settings including temperature, fan speed and airflow direction for both heating and cooling operation, at the touch of a button. A lower set-back temperature of 10°C can be selected when the room is unoccupied, so that less energy is required to restore preferred temperature levels when the room is reoccupied.

Econo Cool

This is an energy saving function for cooling during summer. The system raises the temperature by 2°C, and airflow is switched to a swing mode, creating a breeze effect. In this mode, the unit uses less energy to provide an overall cooling effect.

Superior Comfort

Quiet Fan Speed

Mitsubishi Electric Heat Pumps are designed to be very, very quiet. Constant development to reduce sound levels has resulted in our high wall units starting at an amazingly quiet 19dBA. Many manufacturers claim low sound levels only on their lowest fan setting. Mitsubishi Electric Heat Pumps are designed to be quiet on all fan speeds. The introduction of a “Quiet” Fan Speed provides truly quiet operation without compromising comfort levels.

Swing Vanes

In this mode, the vanes will swing automatically, ensuring the heat reaches all areas. In cooling, this also creates a “breeze” effect.

Wide & Long Airflow

Allows the airflow direction to be adjusted according to your preference at the touch of a button. Wide mode allows airflow to be directed at a wider range from left to right. Long mode extends airflow to up to 12 metres to reach even the furthest point of large living rooms or open plan areas.

Designed To Heat

Guaranteed Low Temperature Performance

All Mitsubishi Electric Heat Pumps are guaranteed to provide heating at low temperatures. Our heat pumps supply heating right down to -15°C.

HyperCore® Guarantee

Superior heating performance guaranteed, regardless of outdoor temperatures. The only Heat Pump guaranteed to produce it's fully rated heating capacity right down to -15°C. *More on p. 11.*

A Breath Of Fresh Air

Plasma Duo Filter System

See p. 10

Nano Platinum Filter

Incorporates platinum particles into the filter material to provide semi-permanent antibacterial and deodorising properties, eliminating airborne bacteria while improving air quality.

Long Life Filter

To provide deodorising and air purifying performance, these washable filters can be used for up to 2,500 hours.

Healthy Catechin Filter

Catechin is a compound found in green tea. It has both antiviral and antioxidant qualities, as well as excellent deodorising properties.

Anti Allergy Enzyme Filter

Enzymes contained within the filter combat allergens, with the power to remove harmful microbes such as bacteria, viruses, dust mites and pollen.

Self Cleaning Ozone Function

To ensure the coil within the indoor unit is kept clean and free from impurities the unit will perform a self-clean operation using Ozone to both sterilise and deodorise.

Sophisticated Design

Flat Panel Style

Using understated, clean lines, our high wall units are sure to fit seamlessly into any interior.

Compact Size

Mitsubishi Electric understands that a heat pump needs to be unobtrusive as well as quietly efficient. Our heat pumps have been designed to be as compact as possible, while ensuring maximum heating and cooling performance is not compromised.

Pure White Finish

With a pure white finish, these units provide a sophisticated addition to any room.

Convenience

24 Hour Timer on Remote

A feature of the infra-red remote controllers provided with our heat pumps, which allows the unit to be pre-programmed to start up or turn off according to your schedule on a daily basis. Programming your heat pump to start up before you wake or return home means you can enjoy total comfort with ease.

7 Day Hand Held Timer

The 7-day timer function stores up to four settings (per 24 hour period) including start/stop operation and temperature settings on a weekly basis, eliminating the need to reset the timer daily. *More on p. 8.*

Auto Change Over

The system will automatically switch between heating and cooling once the desired temperature is reached, to maintain the room temperature without user intervention. For example, on a frosty morning the unit will operate in heating mode to maintain a room temperature of 21°C. Once the sun rises and begins to warm the room, the unit can switch to cooling to maintain the 21°C set temperature.

Powerful Mode

The automatic, one-touch Powerful Mode ensures faster heating or cooling by producing more airflow than even the "Super High" fan speed setting. A room can be heated or cooled to the desired temperature in less than 15 minutes before the unit automatically returns to the regular setting.

Installation and Maintenance

Easy Installation

A multitude of features including long length piping, simple flare connections and installation plates have been incorporated into our heat pump systems to ensure installation is as simple as possible for the installer.

Self Diagnosis Function

Loaded with automatic diagnosis functions, fault or failure recall mode and other sophisticated aids, troubleshooting is immediate though problems are rare.

Multi-Split Connection

Almost all of the indoor components of the systems listed in this brochure are available for connection to Multi-Split Outdoor units. For system designs to suit entire homes, you are free to select from a variety of indoor unit styles, not limited to one type.

The Measure of Energy Efficency - ACOP / AEER

A calculated measurement of annual efficiency. In addition to the ratio of kW input to kW output, this calculation factors in other variables like the non-operating (standby) power of the heat pump.

Specifications

QUICK GLANCE	TYPE		High Wall Heat Pumps									
	SERIES		MSZ-GE Series (Small - Medium Room)				MSZ-GE Series (Large Room)			Deluxe MSZ-FB Series		
	MODEL		MSZ-GE25	MSZ-GE33	MSZ-GE42	MSZ-GE50	MSZ-GE60	MSZ-GE71	MSZ-GE80	MSZ-FB25	MSZ-FB35	MSZ-FB50
	INDOOR UNIT		MSZ-GE25VA	MSZ-GE33VA	MSZ-GE42VA	MSZ-GE50VA	MSZ-GE60VA	MSZ-GE71VA	MSZ-GE80VA	MSZ-FB25VA	MSZ-FB35VA	MSZ-FB50VA
	OUTDOOR UNIT		MUZ-GE25VA	MUZ-GE33VA	MUZ-GE42VA	MUZ-GE50VA	MUZ-GE60VA	MUZ-GE71VA	MUZ-GE80VA	MUZ-FB25VA	MUZ-FB35VA	MUZ-FB50VA
	COOL		2.5kW 4.25 AEER 19 dBA*	3.3kW 3.69 AEER 19 dBA*	4.2kW 3.34 AEER 26 dBA*	5.0kW 3.06 AEER 28 dBA*	6.0kW 3.49 AEER 29 dBA*	7.1kW 3.39 AEER 30 dBA*	8.0kW 3.12 AEER 30 dBA*	2.5kW 4.63 AEER 20 dBA*	3.5kW 3.94 AEER 20 dBA*	5.0kW 3.19 AEER 29 dBA*
	HEAT		3.2kW 4.31 ACOP 19 dBA*	4.0kW 3.82 ACOP 19 dBA*	5.4kW 3.54 ACOP 26 dBA*	5.8kW 3.56 ACOP 28 dBA*	6.8kW 3.75 ACOP 29 dBA*	8.1kW 3.75 ACOP 30 dBA*	9.0kW 3.52 ACOP 30 dBA*	3.2kW 4.89 ACOP 20 dBA*	4.0kW 4.42 ACOP 21 dBA*	6.0kW 3.68 ACOP 27 dBA*
	ENERGY STAR		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	ENERGY RATING		4.0 4.0	2.5 3.0	2.0 2.5	1.5 2.5	2.0 3.0	2.0 2.5	1.5 2.5	4.5 5.0	3.0 4.0	1.5 2.5
	PREVIOUS ENERGY RATING		6.0 6.0	6.0 6.0	5.5 5.0	4.5 4.0	6.0 6.0	5.5 6.0	4.5 5.0	6.0 6.0	6.0 6.0	5.0 5.5
COOL	Capacity	Rated	[kW]	2.5	3.3	4.2	5.0	6.0	7.1	8.0	2.5	3.5	5.0
		Min-Max	[kW]	1.1 - 3.5	1.4 - 3.9	0.9 - 4.8	1.4 - 5.4	1.5 - 7.5	2.4 - 8.7	2.4 - 9.2	1.1 - 3.5	1.1 - 4.1	0.8 - 5.8
	Input	Rated	[kW]	0.56	0.91	1.26	1.64	1.76	2.13	2.56	0.53	0.89	1.60
		Min-Max	[kW]	0.21 - 1.15	0.32 - 1.56	0.16 - 1.94	0.32 - 2.06	0.28 - 2.38	0.57 - 3.37	0.57 - 3.58	0.26 - 0.97	0.26 - 1.12	0.26 - 2.45
	AEER			4.25	3.69	3.34	3.06	3.49	3.39	3.12	4.63	3.94	3.19
	Star Rating			4.0	2.5	2.0	1.5	2.0	2.0	1.5	4.5	3.0	1.5
	Sound Level	In (Quiet)	[dBA]	19	19	26	28	29	30	30	-	-	-
		In (low-SHi*)	[dBA]	21-29-36-42	22-30-36-43	30-35-40-46	33-38-44-49	37-41-45-49	37-41-45-49	37-41-45-49	20-29-36-42	20-29-36-43	29-39-45-52
		Out (SPL*)	[dBA]	46	47	50	54	55	55	55	46	47	54
	Rated Current (In+Out)		[A]	2.9	4.3	5.8	7.4	7.8	9.4	11.3	2.6	4.1	7.1
	Max. Current		[A]	7.4	8.6	10	13.0	14.5	16.6	16.6	10	10	16
	Air Volume In (SHi*)		[L/s]	188.3	211.7	211.7	251.7	305.0	298.3	298.3	187	187	247
HEAT	Capacity	Rated	[kW]	3.2	4.0	5.4	5.8	6.8	8.1	9.0	3.2	4.0	6.0
		Min-Max	[kW]	1.3 - 4.5	1.4 - 4.8	1.4 - 6.0	1.4 - 7.2	2.0 - 9.3	2.2 - 9.9	2.2 - 11.1	1.5 - 5.5	1.5 - 6.0	0.9 - 7.8
		@ -15 °C	[kW]	**	**	**	**	**	**	**	**	**	**
	Input	Rated	[kW]	0.73	1.03	1.54	1.65	1.77	2.11	2.54	0.66	0.90	1.64
		Min-Max	[kW]	0.26 - 1.20	0.34 - 1.55	0.27 - 2.04	0.32 - 2.49	0.46 - 2.94	0.52 - 3.25	0.52 - 3.65	0.48 - 1.90	0.48 - 1.90	0.48 - 2.95
	ACOP			4.31	3.82	3.54	3.56	3.75	3.75	3.52	4.89	4.42	3.68
	Star Rating			4.0	3.0	2.5	2.5	3.0	2.5	2.5	5.0	4.0	2.5
	Sound Level	In (Quiet)	[dBA]	**19**	**19**	**26**	**28**	**29**	**30**	**30**	-	-	-
		In (Low-SHi*)	[dBA]	21-29-36-42	22-30-36-43	30-35-40-46	33-37-43-48	37-41-45-49	37-41-45-49	37-41-45-49	20-29-36-43	21-29-36-44	27-37-43-50
		Out (SPL*)	[dBA]	48	48	51	56	55	55	55	46	50	56
	Rated Current (In+Out)		[A]	3.8	4.8	7.0	7.4	7.8	9.5	11.2	3.1	4.1	7.3
	Max. Current		[A]	7.4	8.6	10	13.0	14.5	16.6	16.6	10	10	16
	Air Volume In (SHi*)		[L/s]	191.7	191.7	218.3	241.7	305.0	298.3	298.3	202	208	247
Controller	Standard			Infra Red Remote				Infra Red Remote with 7 Day Timer			Infra Red Remote		
	Optional Wired 7 Day Timer			*Optional:* PAR-21 / PAR-30				*Optional:* PAR-21 / PAR-30			*Optional:* PAR-21 / PAR-30		
Power Supply	(Powered from outdoor unit)			230 / Single Phase / 50 Hz				230 / Single Phase / 50 Hz			230 / Single Phase / 50 Hz		
Indoor	Dimensions (WxDxH)		[mm]	798 x 232 x 295				1,100 x 238 x 325			798 x 257 x 295		
	Weight		[kg]	10				16			12		
Outdoor	Dimensions (WxDxH)		[mm]	800 x 285 x 550	800 x 285 x 550	800 x 285 x 550	840 x 330 x 850	840 x 330 x 880	840 x 330 x 880	840 x 330 x 880	800 x 285 x 550	800 x 285 x 550	840 x 330 x 850
	Weight		[kg]	30	30	36	54	50	53	53	36	36	55
	Sound Level (SPL*/Power)		[dBA]	46-48 / 58-59	47-48 / 61-62	50-51 / 62-64	54-56 / 69	55 / 69	55 / 69	55 / 69	46	47 - 50	54 - 56
Piping	Diameter (Liquid/Gas)		[mm]	6.35 / 9.52	6.35 / 9.52	6.35 / 9.52	6.35 / 12.7	6.35 / 15.88	9.52 / 15.88	9.52 / 15.88	6.35 / 9.52	6.35 / 9.52	6.35 / 12.7
	Max. Length/Height†		[m]	20 / 12	20 / 12	20 / 12	30 / 15	30 / 15	30 / 15	30 / 15	20 / 12	20 / 12	30 / 15
	Chargeless Piping Length		[m]	7	7	7	7	10	10	10	7	7	7
Operation Range Outdoor	Cooling		[°C]	-10 / +46	-10 / +46	-10 / +46	-10 / +46	-10 / +46	-10 / +46	-10 / +46	-10 / +46	-10 / +46	-10 / +46
	Heating		[°C]	-15 / +24	-15 / +24	-15 / +24	-15 / +24	-15 / +24	-15 / +24	-15 / +24	-15 / +24	-15 / +24	-15 / +24

YOUR GUARANTEE OF EXCELLENCE

This emblem is your assurance of the very best in technology and quality as it represents Mitsubishi Electric's continuing efforts in making our heat pumps the industry standard. Every Mitsubishi Electric Heat Pump is a product of painstaking research, relentless testing, and a resolute determination to improve upon vital performance characteristics. As a result, our heat pumps have become more durable, less costly to operate, quieter, easy on installation and maintenance, and better able to distribute air evenly throughout any type of interior. This kind of commitment to quality enables our products to create remarkably pleasant environments that will ultimately make your life more comfortable.

Mitsubishi Electric Quality

	High Wall Heat Pumps		Floor Console Heat Pumps				Ceiling Cassette Heat Pumps		
	HyperCore®		MFZ-KA Series			HyperCore®	SLZ-KA Series		
	MSZ-FB35	MSZ-FB50	MFZ-KA25	MFZ-KA35	MFZ-KA50	MFZ-FB50	SLZ-KA25	SLZ-KA35	SLZ-KA50
	MSZ-FB35VA	MSZ-FB50VA	MFZ-KA25VA	MFZ-KA35VA	MFZ-KA50VA	MFZ-FB50VA	SLZ-KA25VAL/Q	SLZ-KA35VAL/Q	SLZ-KA50VAL/Q
	MUZ-FB35VAH	MUZ-FB50VAH	SUZ-KA25VA2	SUZ-KA35VA2	SUZ-KA50VA2	MUFZ-FB50VAH	SUZ-KA25VA2	SUZ-KA35VA2	SUZ-KA50VA2
Cooling	3.5kW 3.94 AEER 20 dBA*	5.0kW 3.19 AEER 29 dBA*	2.5kW 3.96 AEER 22 dBA*	3.5kW 3.37 AEER 23 dBA*	4.8kW 3.21 AEER 32 dBA*	4.8kW 3.02 AEER 32 dBA*	2.5kW 3.53 AEER 28 dBA*	3.5kW 4.1PL AEER 29 dBA*	4.6kW 2.95 AEER 30 dBA*
Heating	4.0kW 4.42 ACOP 21 dBA*	6.0kW 3.68 ACOP 27 dBA*	3.4kW 3.83 ACOP 22 dBA*	4.0kW 3.70 ACOP 25 dBA*	6.0kW 3.28 ACOP 32 dBA*	5.4kW 3.45 ACOP 32 dBA*	3.2kW 3.65 ACOP 28 dBA*	4.0kW 3.58 ACOP 29 dBA*	5.0kW 3.17 ACOP 30 dBA*
	ENERGY STAR	ENERGY STAR				ENERGY STAR			
	3.0 / 4.0	1.5 / 2.5	3.0 / 3.0	2.0 / 2.5	1.5 / 2.0	1.5 / 2.0	2.5 / 2.5	2.0 / 2.5	1.0 / 1.5
	6.0 / 6.0	5.0 / 5.5	6.0 / 6.0	4.5 / 5.0	4.5 / 4.0	4.5 / 5.0	6.0 / 5.0	5.0 / 5.0	3.5 / 4.0
Nominal Capacity (kW)	3.5	5.0	2.5	3.5	4.8	4.8	2.5	3.5	4.6
Capacity Range (kW)	0.8 - 4.1	0.8 - 5.8	0.9 - 3.4	0.9 - 3.9	0.9 - 5.4	0.9 - 5.4	0.9 - 3.2	1.0 - 3.9	1.1 - 5.2
Rated Current (A)	0.89	1.60	0.58	1.09	1.55	1.55	0.68	1.04	1.53
Current Range (A)	0.16 - 1.12	0.26 - 2.45	0.19 - 0.94	0.19 - 1.25	0.19 - 1.98	0.26 - 1.98	0.25 - 1.00	0.27 - 1.33	0.49 - 2.13
AEER	3.94	3.19	3.96	3.37	3.21	3.02	3.53	4.1 PL	2.95
ACOP	3.0	1.5	3.0	2.0	1.5	1.5	2.5	2.0	1.0
Star Rating (Heating)	-	-	-	-	-	-	-	-	-
Sound Pressure Level (dBA)	20-29-36-43	29-39-45-52	22-27-32-37	23-28-33-38	32-35-39-43	32-37-43-48	28-31-37	29-33-38	30-34-39
Sound Power Level (dBA)	47	54	46	47	53	54	46	47	53
Rated Power Input (kW)	4.1	7.1	2.83	5.2	7.0	6.9	3.40	4.90	7.40
Max Power Input (kW)	10.5	16	6.4	9.4	16.2	16	8.16	9.18	16.0
Max Current (A)	187	247	145	152	178	221.7	167	183	183
Nominal Capacity (kW)	4.0	6.0	3.4	4.0	6.0	5.4	3.2	4.0	5.0
Capacity Range (kW)	1.3 - 6.5	0.9 - 8.2	0.9 - 5.1	0.9 - 6.2	0.9 - 7.9	0.9 - 7.9	0.9 - 4.5	0.9 - 5.0	0.9 - 6.5
Rated Current (A)	4.0	6.0	**	**	**	5.4	**	**	**
Current Range (A)	0.90	1.64	0.84	1.10	1.86	1.58	0.83	1.10	1.55
COP	0.40 - 2.50	0.48 - 3.14	0.19 - 1.91	0.19 - 2.24	0.19 - 2.81	0.19 - 2.81	0.17 - 1.36	0.25 - 1.46	0.39 - 3.36
EER	4.42	3.68	3.83	3.70	3.28	3.45	3.65	3.58	3.17
Star Rating (Cooling)	4.0	2.5	3.0	2.5	2.0	2.0	2.5	2.5	1.5
Sound Pressure Level (dBA)	-	-	-	-	-	-	-	-	-
Sound Power Level (dBA)	21-29-36-44	27-37-43-50	22-27-32-37	25-28-33-38	32-35-39-44	32-37-43-49	28-31-37	29-33-38	30-34-39
Rated Power Input (kW)	50	56	46	48	55	56	46	48	55
Max Power Input (kW)	4.1	7.3	4.0	5.0	8.5	7.0	4.0	5.1	7.0
Max Current (A)	10.5	16	6.4	9.4	16.2	16	8.16	9.18	16.0
	208	247	152	158	197	228.3	167	183	183
Controller	Infra Red Remote		Infra Red Remote				~VAL: Infra Red Remote, ~VAQ: PAR-21 / 30 Wired 7 Day Timer		
	Optional: PAR-21 / PAR-30		*Optional:* PAR-21 / PAR-30						
Power Supply	230 / Single Phase / 50 Hz		230 / Single Phase / 50 Hz				230V / Single Phase / 50 Hz		
Dimensions (H x W x D) (mm)	798 x 257 x 295		700 x 200 x 600				570 x 570 x 235 (Panel: 650 x 650 x 20)		
Weight (kg)	12		14				17 (Panel: 3)		
Packaging (H x W x D) (mm)	800 x 285 x 550	840 x 330 x 850	800 x 285 x 550	800 x 285 x 550	840 x 330 x 850	840 x 330 x 850	800 x 285 x 550	800 x 285 x 550	840 x 330 x 850
Packaging Weight (kg)	36	55	30	33	53	55	30	33	53
Sound Pressure Level (dBA)	47 - 50	54 - 56	46 / 59	47-48 / 61	53-55 / 68	54 / 56	46 / 59	47-48 / 61	53-55 / 68
Liquid Pipe (mm)	6.35 / 9.52	6.35 / 12.7	6.35 / 9.52	6.35 / 9.52	6.35 / 12.7	6.35 / 12.7	6.35 / 9.52	6.35 / 9.52	6.35 / 12.7
Gas Pipe (mm)	20 / 12	30 / 15	20 / 12	20 / 12	30 / 30	30 / 15	20 / 12	20 / 12	30 / 30
Max Pipe Length (m)	7	7	7	7	7	7	7	7	7
Operating Range (°C)	-10 / +46	-10 / +46	-10 / +46	-10 / +46	-10 / +43	-10 / +46	-10 / +46	-10 / +46	-15 / +43
Operating Range (°C)	-25 / +24	-25 / +24	-15 / +24	-15 / +24	-15 / +24	-25 / +24	-15 / +24	-15 / +24	-15 / +24

***Sound Level**: (SHi = Super High).

(Quiet-SHi*) Quiet / Low / Medium / High / Super High.

(Low-SHi*) Low / Medium / High / Super High.

(Low-Hi*) Low / Medium / High.

Out SPL: Outdoor Sound Pressure Level measured under rated operating frequency.

*Sound Levels rated at lowest fan speed.

Note:

1. Rating Conditions (AS / NZS 3823).

Cooling – Indoor: 27°C DB, 19°C WB. Outdoor: 35°C DB

Heating – Indoor: 20°C DB Outdoor: 7°C DB, 6°C WB.

Refrigerant piping length (one way): 5 m

2. Guaranteed operating range: see specifications table.

3. Dry function will not work when the room temperature is below 13°C

AEER = Annual Energy Efficiency Ratio

ACOP = Annual Coefficient of Performance

These include standby power in the rating calculation.

PL = Measured at Part Load.

Colour: Heat pump units shown may not be colour accurate, please ensure you view an actual unit for colour matching.

† Maximum length is inclusive of height differential. i.e. (20/12) means the pipe can be 12m high and 8m across for a total length of 20m.

** Refer to Technical Manual

PAR-21MAA

7 Day Timer

PAR-30MAA

Backlit Screen - 7 Day Timer

PAR-21MAA - 7 Day Wall Mounted Timer

The Wired 7 Day Timer allows you to program up to 8 separate stop/start patterns per day over a 7 day period, and can be connected to all Mitsubishi Electric High Wall and Floor Console models listed in this brochure. The PAR-21MAA allows your system to be programmed to maintain optimal temperatures during the time when you are likely to be in the room. An Operation Control Function can be used to limit the set temperature range, preventing excessive heating or cooling being selected. An Operation Lock also prevents random modification of settings by locking either all buttons, or all buttons other than ON/OFF. The PAR-21MAA features Multi Language display, and can be set to display 8 different languages.

PAR-30MAA – Deluxe 7 Day Wall Mounted Timer

Includes all of the listed features of the PAR-21MAA Controller, and also offers the following, at the touch of a button: LCD backlit screen, Large Display, Night Setback, Mode view icons and words.

Example:

- **6am** : The temperature automatically changes to 21°C.
- **8am** : The heat pump turns off while the home is unoccupied.
- **5pm** : The heat pump turns back on and with the temperature set at 21°C, this warms the home in preparation for your return home.
- **11pm** : The temperature reduces to 18°C, while you are sleeping for energy saving operation.

Committed to Quietness

Quality you can rely on

- All units line tested
- Performance tested
- 800 hour heat stress test
- 2000 hour endurance test

5 YEAR WARRANTY

Mitsubishi Electric Heat Pumps come with a full 5 year parts, labour, and compressor warranty. Warranty conditions apply.

CUSTOMER SERVICE

For more information on Mitsubishi Electric Heat Pumps, please call our customer service team on **0800 784 382.**

Be sure to ask for Mitsubishi Electric. Other brands share the 3-diamond logo, however are separate to the Mitsubishi Electric brand and cannot supply the models, features or guarantees outlined in this brochure.

MITSUBISHI ELECTRIC

B D T

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All features and specifications are subject to change and amendment at anytime. June 2011